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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/705,671	11/03/2000	David Martin	03445-P002A	6264
24126	7590	03/30/2004	EXAMINER	
ST. ONGE STEWARD JOHNSTON & REENS, LLC 986 BEDFORD STREET STAMFORD, CT 06905-5619			LE, KHANH H	
			ART UNIT	PAPER NUMBER
			3622	

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/705,671	MARTIN, DAVID <i>M.L.</i>	
	<b>Examiner</b>	<b>Art Unit</b>	
	Khanh H. Le	3622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on \_\_\_\_\_.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-23 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_ is/are allowed.  
 6) Claim(s) 1-23 is/are rejected.  
 7) Claim(s) \_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>02/12/01</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

***Detailed Action***

1. This Office Action is in response to the original application and the IDS filed on 2/12/2001. Claims 1-23 are presented for examination. Claims 1,5, 9,15,19 are independent.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
*The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.*

3. **Claims 2-3, 7-8, 10, 11, 14, 16, 17, 20-21, 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claims 2 and 3: It is unclear whether the ‘group of identified customers’ in these claims are the same as the “a selected subset of customers” in claim 1 or another subset thereof. Appropriate correction is required. For prior art application purposes, presently it is interpreted that the ‘group of identified customers’ is another subset of the “a selected subset of customers” in claim 1.

Claims 10, 11, 16, 17, 20-21, with the same drafting ambiguities with respect to their independent claims, are rejected on the same basis.

Claims 7 and 8: It is unclear whether the ‘one or more first(second )target group of customers’ in these claims are the same as the “ selected subset of customers” in claim 6 or another subset thereof. Appropriate correction is required. For prior art application purposes, presently it is interpreted that the ‘one or more first(second )target group of customers’ in these claims are the same as the “selected subset of customers” in claim 6.

Claims 14, 23, with the same drafting ambiguities as claim 8, with respect to their independent claims, are rejected on the same basis.

***Claim Rejections - 35 USC §101***

**4. Claim 1-14, 19-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a

"useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under '101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*.

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However, State Street never addressed the second part of the analysis, i.e., the "technological arts" test established in Toma because the invention in State Street (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the Toma test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

Thus the present basis for a 35 USC 101 inquiry is a two-prong test :

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

As to the second prong of the test, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the claimed inventions 9, 19 produce response measurements (i.e., repeatable) used to produce a modified contact frequency prioritized list (i.e., useful and tangible).

However claim 1 fail the second prong of the test as it produces response measurements not used for any purpose (i.e., not useful nor tangible).

Further independent claims 1,9, 19 all fail the first prong of the test.

Under this test, for a process claim to pass muster under the "technological arts" prong, the recited process must somehow apply, involve, use, or advance the technological arts. In the present case, claims have no connection to the technological arts. The recited steps of merely creating a prioritized list, adjusting the frequency and measuring changes do not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of a person, by use of a pencil and paper, then manually and physically presenting to another person.

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) or mere implication of employing a machine or article of manufacture to

perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea which is without connection to the technological arts unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble.

In the present case, neither the preamble nor any of the recited steps are directed to anything in the technological arts as explained above. Looking at the claim as a whole, nothing in the body of the claim recites any structure or functionality to suggest that a computer performs the recited steps. Therefore, the preamble is taken to merely recite a field of use.

Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, claims 1 are deemed to be directed to non-statutory subject matter.

To overcome this rejection the Examiner recommends that Applicant amend the claims to better clarify which of the steps are being performed within the technological arts, such as incorporating a computer network or electronic network into the presenting steps; for example: “(a) creating on a computer an electronic prioritized list ...”. The other claims could be similarly amended to include a computer.

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

6. **Claims 1, 5-9,13-15,19,23 are rejected under 35 U.S.C. 103(a) as being unpatentable over "How to establish quality control over the sales force" by Ed Roseman, Medical Marketing and media v27, n10, p.544(7) , Oct. 1992, Dialog File 148, record # 06199077, hereinafter Roseman, in view of "Selling" by Anonymous, Marketing Telemarketing Awards 1997 Supplement, pp 18-19, Jun 19, 1997, Dialog File 15, Record # 01444255, hereinafter Anonymous.**

As to claim 1 Roseman discloses

A method of determining effectiveness of direct personal promotion efforts in a marketing environment in which representatives make contact with a customer in accordance with a prioritized list, comprising the steps of:

a) creating a prioritized list of customers for representatives of an organization to use in contacting customers, said prioritized list including an identification of a customer identity and a specified contact frequency for each such customer to be executed by said representatives (page 1, 5<sup>th</sup> full paragraph  
: docs are ranked, i.e. identification of each is implied ; then specific call frequencies are assigned to them)

Roseman does not specifically disclose but Anonymous , at page 2, 2<sup>nd</sup> to 9<sup>th</sup> paragraphs, does disclose

b) adjusting a specified contact frequency for a selected subset of customers (the 20,000 smaller customers out of all customers) to create an adjusted prioritized list ( adjusting the contact frequency from zero contact to some contact, p. 2, 7<sup>th</sup> paragraph);

c) communicating said adjusted prioritized list to said representatives (this is implied) ;

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d) measuring changes (interpreted as measured against a control group) in the promotional response among said selected subset of customers( p. 2, 9<sup>th</sup> paragraph: measure 27.9% more as against a control group of the 20,000 smaller customers subset).

It would have been obvious to one skilled in the art at the time the invention was made to add Anonymous's method of adjusting contact frequency for a small group and test measured responses changes as against a control group to Roseman' s prioritized list to determine whether changing call frequencies increase sales as a step toward determining optimum call frequencies (Roseman p. 2, 4<sup>th</sup> paragraph) and in the process to identify the better leads (Roseman, at page 2, 1<sup>st</sup> to 6<sup>th</sup> paragraphs, discloses "constantly fine-tuning the physician selection").

As to claims 6-7 (dependent on claim 1) and independent claims 9, 15,19, neither Anonymous or Roseman specifically discloses

"using a measured change (increase) in promotional response among said selected subset of customers as an input to creation of an updated prioritized list specifying a modified contact frequency for certain ( or one or more first target group of ) customers",

However, Anonymous discloses a measured change (increase) (29.7% increase) in promotional response among a selected subset of customers. Implicit in Anonymous's change measure is the identification of the better respondents.

On the other hand, Roseman discloses monitoring and fine tuning of doctor targets i.e. of the prioritized list. Roseman further discloses better responding doctors get higher call frequencies (page 1, 10<sup>th</sup> paragraph) .

It would have been obvious to one skilled in the art at the time the invention was made, in view of the explicit teachings of both references as stated above, to add Anonymous to Roseman and have the claimed "using a measured change (increase) in promotional response among said selected subset of customers as an input to creation of an updated prioritized list specifying a

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modified contact frequency for certain customers (claim 6) or for or one or more first target group of customers most likely to generate additional sales in response to a increased contact frequency.(claims 7 and 9).

In other words, once a positive response has been determined in response to an increase in contact frequency (such as 29.7% as taught by Anonymous) and implicitly the better respondents identified, it would have been obvious to one skilled in the art at the time the invention was made, in view of Roseman's teaching that docs who respond well to calls ("customers most likely to generate additional sales in response to a increased contact frequency") get higher call frequencies, to use that data of higher response to calls (such as 29.7% as taught by Anonymous)as an input to further identify the higher potential doctors and to modify (increase) the call frequency to that group of positively responding customers (doctors), thereby creating a "updated prioritized list specifying a modified contact frequency", to those identified customers, to potentially improve ROTI ( return on time invested) as taught by Roseman (p. 2 , 4<sup>th</sup> paragraph).

Claim 15 essentially parallels claim 9 in software format and is rejected on the same basis (Roseman's optimization page 2, 4<sup>th</sup> paragraph suggests the use of computers and software).

Claim 19 essentially parallels claim 9 with the addition of communication the updated prioritized list to pharmaceuticals representatives, which would have been obvious in order to carry out the modified sales campaign.

As to claims 5, 13 (dependent on claims 1 and 9 respectively), monitoring of actual contacts with customers is taught by Roseman at p. 1 , 9<sup>th</sup> paragraph, thus "measuring changes in actual contacts by said representatives with said selected subset of customers" in the Roseman/Anonymous system would have been obvious to one skilled in the art at the time the invention was made to be able to measure the changes taught by Anonymous and thereby effect the Roseman/Anonymous method.

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As to claims 8, 14, 23 (dependent on claims 1, 9, 19 respectively) neither Anonymous or Roseman specifically discloses

using a measured decrease (change) in promotional response among said selected subset (one or more second target groups) of customers as an input to creation of an updated prioritized list with a modified contact frequency decreasing contact frequency with customers whose promotional response is least affected by a decrease in contact frequency.

However, if the response measured is negative when applied to a (second or subset group of doctors, it would have been obvious to one skilled in the art at the time the invention was made, to identify that group of doctors as low-responding and in view of Roseman's teaching that lower responding docs get lower call frequency (p. 1 8<sup>th</sup> paragraph), the lower measured response thus would have been used as an input to the "creation of an updated prioritized list with a modified (decreased) contact frequency applicable to customers contained in said one or more second target groups of customers" and "whose promotional response is least affected by a decrease in contact frequency" to better focus sales efforts as taught by Roseman (page 1, 9<sup>th</sup> paragraph; page 2, 1<sup>st</sup> paragraph) by spending less time with the low potential customers.

**7. Claims 2-4, 10-12, 16-18, 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roseman, in view of Anonymous and further in view of "I want my MVT ": Drive marketing results with multivariate testing techniques" by Bell, Gordon H., Dialog File 15, record #01549882, herereinafter Bell.**

As to claims 2-4, neither Roseman nor Anonymous specifically disclose the step b) of adjusting the specified contact frequency comprises increasing (claim 2) or decreasing (claim 3) a quantity of contacts made with a group of identified customers in a

specified time period or increasing a quantity of contacts made with a first group of identified customers and decreasing a quantity of contacts made with a second group of identified customers (claim 4)

However Bell discloses a method for testing, in the market place, several ideas at the same time on different subgroups, measuring the results from each test on each group then rolling out the best idea to the whole group later (see page 2-3). At page 3, 7<sup>th</sup> paragraph, Bell further teaches modifying calls frequency (decreasing calls frequency from one week to 4 weeks apart) and measuring the effect of such change ("helped"),(inherently using data covering two periods of the same length).

It would have been obvious to one skilled in the art at the time the invention was made to add the Bell MVT test and measure technique as applied to call frequencies to the prioritized list based on call frequency system of Roseman/Anonymous effectively to test and measure the marketplace effect of several ideas (different call frequencies) such as taught by Bell.

As to claims 2 and 3, it to use an increasing or decreasing frequency (as applied to one subgroup and test against another control group) as a test parameter when finding an optimum frequency as taught by Roseman ( P. 2 4<sup>th</sup> paragraph).

As to claim 4, testing both increasing and decreasing frequencies is, as stated above, effectively to test and measure the marketplace effect of several ideas (different call frequencies) quickly, as taught by Bell.

As to claims 10-12, 16-18, 20-22 (dependent on claims 9, 15, 19 respectively) , they parallel claims 2-4 and are rejected on the same basis.

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### **Conclusion**

8. Prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

\*Melchione et al., US 5,966,695, discloses automatic sales leads and marketing system.

Verba, US 6236977, discloses computerized optimization of sales leads.

"Taking Care of the Back End" by Tom Woods, Marketing Computers, v17, n6, p56(3), June 1997, Dialog File 275, record # 02165950, discloses IBM RFM analysis method wherein accounts frequency of contact is prioritized.

"Telemarketing in Recessionary Times " by Jim Domanski, Sales and Marketing Management in Canada, v32n1, pp 21-22, Jan 1991 Dialog File 15, record # 00536225, discloses "call cycling " to rank customers to determine effective contact frequencies.

"Shopping for sales software", by Elisabeth Boone, American Agent and Broker, v67 n11, pp 22-30, Nov 1995, Dialog File 15, record # 01127494, discloses sales and marketing softwares.

\* cited in IDS

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh H. Le whose telephone number is 703-305-0571. The Examiner works a part-time schedule and can normally be reached on Tuesday-Thursday 9:00-6:00.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Eric Stamber can be reached on 703-305-8469. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113

Mar 22, 2004

KH

Khanh H. Le

JAMES W. MYHRE  
PRIMARY EXAMINER